

## REMARKS

Claims 2-18, and 22-25 are pending in this application. Claims 10, 11, 17 and 22 were previously withdrawn from further consideration, and claims 1 and 19-21 were cancelled in the Amendment filed September 19, 2002. Claims 2-3, 12 and 23 are rejected, and claims 4-9, 13-16, 18, and 24-25 are objected to. Claims 2-3, 10-12, 17, 22  
5 and 23 are canceled, and claims 4, 6, 13, 15, 18 and 24 are amended, hereby.

Applicants hereby cancel non-elected claims 10, 11, 17 and 22.

Responsive to the rejection of claims 2-3, 12, and 23 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,992,360 (Elendt et al.), Applicants have cancelled claims 2-3, 12 and 23.

10 The Examiner indicated that claims 4-9, 13-16, 18 and 24-25 would be allowable if rewritten in independent form to include all of the limitations of their respective base claims, for which courtesy the Examiner is thanked. Applicants have rewritten claims 4, 13 and 24 in independent form to include the limitations of their respective base claims. Further, Applicants have amended claim 6 to depend from rewritten claim 4 and amended  
15 claims 15 and 18 to depend from rewritten claim 13. Accordingly, Applicants submit that claim 4 and claims 5-9 depending therefrom, claim 13 and claims 14-16 and 18 depending therefrom, and claim 24 and 25 depending therefrom are now in allowable form. Applicants respectfully request withdrawal of the objection and allowance of the

claims.

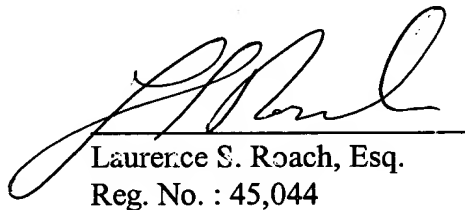
For all the foregoing reasons, Applicants submit that the pending claims are now in allowable form, and Applicants respectfully request withdrawal of all objections and allowance of the claims.

5 In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefore and authorize that any changes be made to Deposit Account No.50-0831, DELPHI TECHNOLOGIES, INC.

10 The Examiner is invited to telephone the undersigned in regard to this Amendment and the above identified application.

Respectfully submitted,

3-FEB-2003  
Date

  
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PATENT  
89190.090700/DP-301278

## IN THE UNITED STATES PATENT & TRADEMARK OFFICE

REPLY UNDER 37 CFR 1.116 - EXPEDITED PROCEDURE - EXAMINING GROUP 3748

Applicant:	Jongmin Lee, et al.	)	
		)	
Serial No.:	09/755,290	)	
		)	Examiner: J. Corrigan
Filed:	January 5, 2001	)	
		)	Art Unit: 3748
For:	VALVE DEACTIVATION	)	
	SYSTEM WITH FREE MOTION	)	
	SPRING	)	

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### MARKED-UP COPY OF AMENDMENTS TO THE CLAIMS

Commissioner for Patents  
Box: AF  
Washington, D.C. 20231

RECEIVED  
FEB 13 2003  
TECHNOLOGY CENTER R3700

Dear Sir:

In compliance with 37 CFR §1.121, Applicant hereby submits the following marked-up copy of the revisions made to the Claims by the Amendment submitted in response to the Office Action mailed December 3, 2002.

## IN THE CLAIMS

Claims 2-3, 10-12, 17, 22 and 23 were cancelled.

Claims 4, 6, 13, 15, 18 and 24 were amended as follows:

4. (*Twice Amended*) [The valve deactivation system of claim 2, wherein] A

valve deactivation system, comprising:

a deactivation rocker arm assembly including an elongate rocker arm having an  
end, an aperture defined by said end, a center post slidingly disposed within said aperture,  
5 said center post configured for engaging a valve stem of a valve of an internal combustion  
engine, said end of said rocker arm [defines] defining a first pin bore and a second pin  
bore, said first pin bore and said second pin bore being substantially concentric relative to  
each other, said center post defining a middle pin bore[.];

a locking pin assembly selectively coupling together and decoupling said center  
10 post and said rocker arm, said locking pin assembly including an actuating pin, a second  
pin member and a middle pin member, said actuating pin member slidingly disposed at  
least partially within said first pin bore, said second pin member slidingly disposed at  
least partially within said second pin bore, and said middle pin member slidingly disposed  
at least partially within said middle pin bore; and

15 a free motion spring assembly.

6. (*Amended*) [The valve deactivation system of claim 2, wherein said free motion spring assembly comprises:] A valve deactivation system, comprising:

a deactivation rocker arm assembly including an elongate rocker arm, an aperture defined by said rocker arm, a center post slidingly disposed within said aperture, said

5 center post configured for engaging a valve stem of a valve of an internal combustion engine, a locking pin assembly selectively coupling together and decoupling said center post and said rocker arm; and

a free motion spring assembly including:

an inner spring retainer surrounding a portion of the valve stem;

10 an outer spring retainer surrounding a portion of the valve stem;

an inner spring surrounding a portion of the valve stem, said inner spring being disposed between a disk cap associated with the valve stem and said inner spring retainer; and

an outer spring surrounding said inner spring, said outer spring being

15 disposed between said outer spring retainer and the disk cap.

13. (*Twice Amended*) [The deactivation rocker arm assembly of claim 12, wherein said end of said rocker arm defines] A deactivation rocker arm assembly, comprising:

an elongate rocker arm having an end, an aperture defined by said end, said end  
5 defining a first pin bore and a second pin bore, said first pin bore and said second pin bore  
being substantially concentric relative to each other[,];

a center post slidingly disposed within said aperture, said center post configured  
for engaging a valve stem of a valve of an internal combustion engine, said center post  
defining a middle pin bore[,]; and

10 a locking pin assembly selectively coupling together and decoupling said center  
post and said rocker arm, said locking pin assembly including an actuating pin, a second  
pin member and a middle pin member, said actuating pin member slidingly disposed at  
least partially within said first pin bore, said second pin member slidingly disposed at  
least partially within said second pin bore, and said middle pin member slidingly disposed  
15 at least partially within said middle pin bore.

15. (Amended) The deactivation rocker arm assembly of claim [12] 13, wherein  
said rocker arm includes elongate arms, said arms being one of attached to and integral  
with said body of said rocker arm and extending therefrom.

18. (Amended) The deactivation rocker arm assembly of claim [12] 13, wherein  
said rocker arm, defines a roller orifice, a roller being disposed within said roller orifice

and being coupled to said rocker arm, said roller configured for engaging a cam of the internal combustion engine.

24. (*Amended*) [The internal combustion engine of claim 23, further comprising]

An internal combustion engine, comprising:

an elongate rocker arm, an aperture defined by said rocker arm;

a center post slidingly disposed within said aperture, said center post engaging a  
5 valve stem of a valve of said internal combustion engine;

a locking pin assembly selectively coupling together and decoupling said center  
post and said rocker arm; and

a free motion spring assembly, said free motion spring assembly including:

an inner spring retainer surrounding a portion of said valve stem;

10 an outer spring retainer surrounding a portion of said valve stem;

an inner spring surrounding a portion of said valve stem said inner spring  
being disposed between said inner spring retainer and a disk cap of said internal  
combustion engine, said disk cap being associated with said valve stem; and


an outer spring surrounding said inner spring said outer spring being  
15 disposed between said outer spring retainer and said disk cap.

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claims.

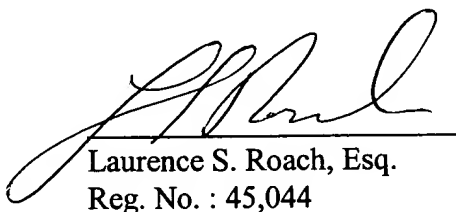
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